2005-11-28

ADVANCED COURSE ON RESISTIVITY IMAGING

2D Imaging with the ABEM Terrameter – Lund Imaging System
Introduction to the Terrameter – Lund Imaging System
Principle of 2D imaging – Continuous Vertical Electrical Sounding (CVES)
Interpretation - inversion of 2D imaging data
Inversion parameter options, i.e. smooth and robust inversion
Resolution and principles of equivalence and suppression
Electrode arrays (focus on multiple gradient array)
Sources of error
Data quality assessment and data editing
Topography handling and positioning in imaging surveys
Exercise: Multiple gradient array data processing/inversion/interpretation
Measurement protocol files for 2D imaging
Exercise: Compile and transfer protocol files for 2D imaging

3D Imaging with the ABEM Terrameter – Lund Imaging System
Quasi 3D imaging (3D visualisation of 2D data sets)
Principle of 3D imaging surveys
Interpretation - inversion of 3D imaging data
Measurement protocol files for 3D imaging
Field exercise – 3D imaging with Terrameter SAS 4000 - ES10-64C – Lund Imaging System
Exercise: 3D imaging data processing/inversion/interpretation

Special Imaging with the ABEM Terrameter – Lund Imaging System
Principle of borehole surveys
Induced polarisation
Time-lapse surveys
Exercise: Time-lapse imaging data processing/inversion/interpretation

Equipment and software
Terrameter SAS 4000
Electrode Selector ES 10-64C
LUND cable system
Erigraph, Res2dinv, Res3dinv

Duration
2 days